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REPORT ON HARVEY VALLEY SALVAGE PROJECT

(Comments by Salman included)

EDMONDS, MARC W. AND S. J. WESTON
SUSANVILLE, CALIFORNIA
JULY 13, 1940

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SALES - Lassen
Insect control.

Susanville, California.
July 13, 1940.

REPORT ON HARVEY VALLEY SALVAGE PROJECT

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INTRODUCTION.

The Bongberg and Weaver report for 1939 on insect losses on the Eastern Lassen stressed the desirability of conducting salvage operations similar to that carried on at the Blacks Mountain Experimental Forest.

Accordingly, sample strips have been run and an extensive reconnaissance made in the Harvey Valley Unit to obtain basic data for such a project.

It was apparent almost immediately that large areas were economically impracticable for treatment, either because of relatively thrifty conditions or because the susceptible trees were low in quality and not attractive for a salvage operation.

VOLUME TO SALVAGE.

Reconnaissance indicates that a relatively heavy salvage area of 2,400 acres, as outlined on the attached map, fringes Harvey Valley. There is an average of 4,000 board feet per acre net in susceptible trees. Experience indicates that a large percentage of these will be dead when the Fruit Growers come to the area in the natural order of logging some ten or fifteen years hence.

A second medium area of susceptibility averages a little less than 2,000 board feet per acre. This includes the hot south slopes of Harvey Mountain and Cone Mountain and is not only light in volume but averages very low in quality.

MARKING STANDARDS.

The following classes of trees should be cut:

1. "3 & 4 spot" risk trees as classified by Salman.

2. Extreme leaners and very heavily fire scarred or other seriously damaged trees.

3. Bug trees, brood not emerged.

4. Bug trees, brood emerged, wood still bright.

SNAG FALLING AND SLASH DISPOSAL.

No snag falling to be done at this time because it will clutter up the ground for later logging.

Brush should be piled and burned only along present travelled roads.

APPRAISAL.

The 1939 appraisal of the adjoining Fruit Growers Supply Co. Sale showed a margin of $1.33 for profit risk and stumpage for pine. After allowing $2.79 for profit and risk etc., a negative margin of $1.46 is left for stumpage.

As a trial of the market, this timber will be advertised at $2.00 per M.B.M. If no bid is forthcoming on this basis, it is planned to ~~try~~ to make an administrative use sale at a reduced price.

Fruit Growers Supply Co. will be given first chance in accordance with sales policy. They should log the area during August and September of this year.

K. V. DEPOSITS.

It is desirable to impound about $1,000 for seeding and planting on the Cone Mountain Burn which is in this area. Question of practicability has to be settled prior

SUMMARY.

Acres ..... 2400. (Heavy salvage)

To cut ..... 8½ to 9½ million feet B.M. or about 4,000 feet B. M. per acre.

Appraised value ... Negative.

HARVEY VALLEY SALVAGE
T. 33N., R. 8E. M.D.M.

			M.B.M.	FEET B.M. PER ACRE		
			CRUISE	TOTAL	NORMAL	SALVAGE
		ACRES	P.P.	PER A.	65% CUT	22% CUT
9	SE¼	160	2,565	16,020		
10	S½	320	6,388	19,960		
14	SW¼	160	1,842	11,510		
15	All	640	9,242	14,440		
16	E½	280	6,240	22,290		
21	W½	320	5,297	16,550		
28	NW¼	160	3,407	21,290		
33	NW NE S½ NW W½ SW	200	3,879	19,400		
	TOTAL	2240	38,860	17,350	11,280	3,817

Trees of high risk rating because of injuries will bring this average up to about 4,000 board feet per acre or to a total figure of between 8,500,000 and 9,500,000 feet B. M.

This indicates a reserve stand of about 7,000 to 7,500 board feet per acre to be cut and 5,500 to 6,000 board feet to be left when the Fruit Growers again log the area some ten or fifteen years hence.

SAMPLE PLOTS

Light Salvage.

NO	ACRES	CUT VOLUME	LEAVE VOLUME	TOTAL VOLUME	TOTAL VOLUME PER A.	OLD CRUISE VOL. PER ACRE	CUT VOLUME PER A.
1	2½	2,310	18,570	20,880	9,280	22,600	1,027
3	2	2,510	26,520	29,030	14,515	16,790	1,255
5	2	2,160	25,150	27,310	13,655	12,400	1,080
7	2	5,040	17,450	22,490	11,245	16,473	2,520
8	4	10,116	48,840	58,956	14,739	17,770	2,529
9	4	7,704	21,590	29,294	7,323	20,410	1,926
TOT.	16½	29,840		187,960	11,570		

Wt'd. cut per acre 1,836 or 15.9%.
Wt'd. total Vol. per acre on samples 11,566.

Heavy Salvage.

NO	ACRES	CUT VOLUME	LEAVE VOLUME	TOTAL VOLUME	TOTAL VOLUME PER A.	OLD CRUISE VOL. PER ACRE	CUT VOLUME PER A.
2	4	16,300	33,730	50,030	12,507	11,530	4,075
4	4	19,120	79,800	98,920	24,730	16,650	4,780
6	4	18,490	41,170	59,660	14,914	14,860	4,622
10	4	7,029	64,040	71,069	17,767	21,330	1,757
11	4	18,495	61,980	80,475	20,118	18,080	4,623
12	2	11,340	25,570	36,910	18,455	14,420	5,670
13	2	3,231	26,760	29,991	14,996	9,480	1,616
tot.	24	94,005		427,055	17,790		

Wt'd. cut per acre 3,917 or 22%.
Wt'd. total Vol. per acre on samples 17,794.

SUBMITTED BY:

Marc W. Edmonds

MARC W. EDMONDS,
Associate Forester.

Approved by:

P. D. Hanson

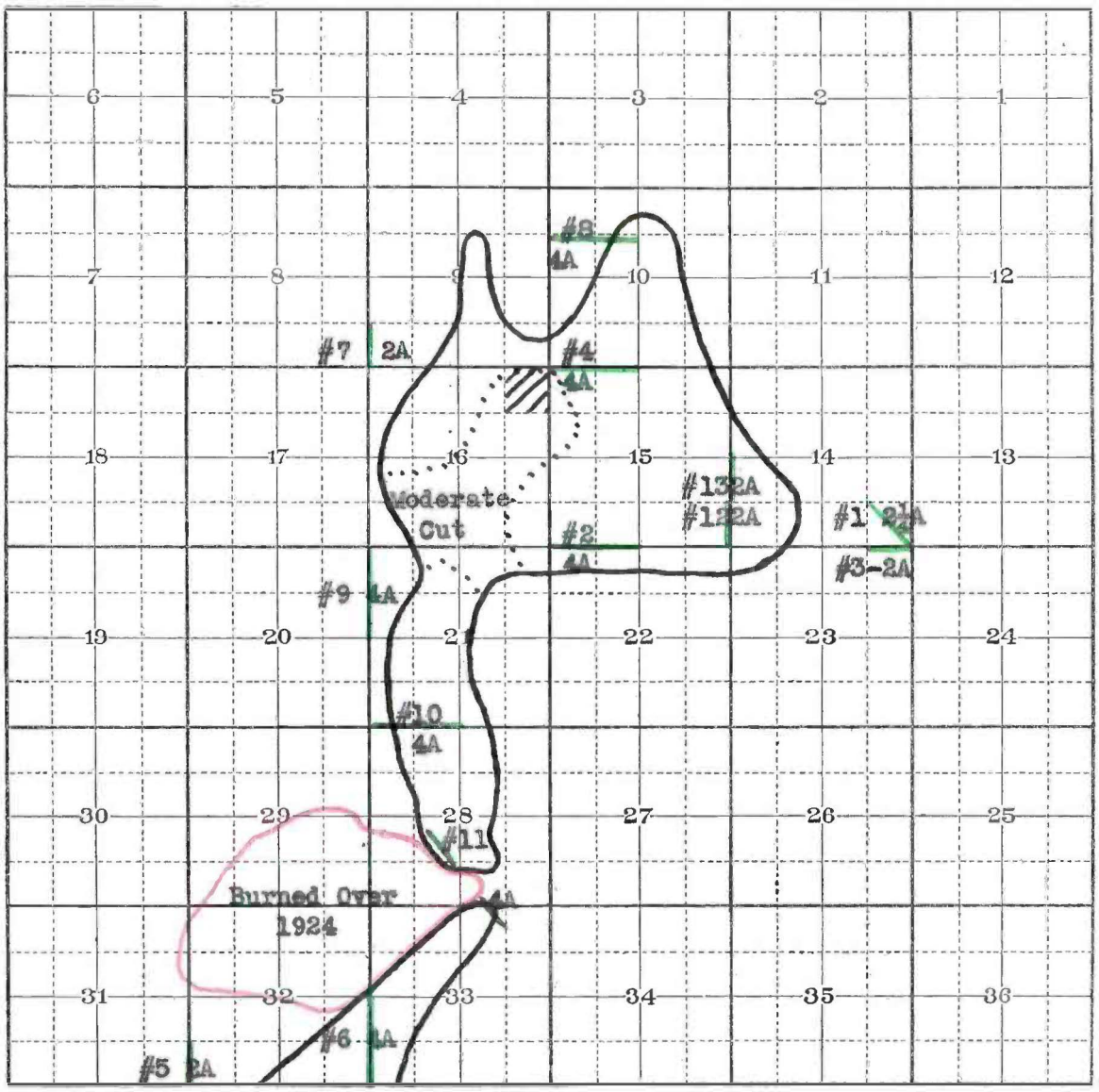
P. D. HANSON
Forest Supervisor.

S. J. WESTON
Junior Forester.

DATE: 7/16/40

Form 974.

T. 33 N., *R.* 8 E., Mt. Diablo *Mer.*



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SCALE.—One inch = 1 mile.

U. S. GOVERNMENT PRINTING OFFICE

PLAT OF PROPOSED SALVAGE AREA & HARVEY-CONE MOUNTAIN

LEGEND

Boundary of Proposed Salvage Area –
Sample Strip (Plot# and Acreage) –
Boundary of Burn (1924) –
Boundary of Moderate Cut –

July 1940.

SJW

325.41
Lassen

Comments on "Report on Harvey Valley Salvage Project (S-Sales-Lassen Insect Control)" of July 13, 1940

cc - R. O. - Dunning

We are gratified at the interest the Lassen is taking in the salvage logging of high risk trees and are extremely interested in their efforts to start salvage logging operations as a preliminary step in managing some of the high hazard virgin stands. We also are aware, however, of the fact that the application of this method in forest insect control practice is now based on the results of but three years of experimental work. We have felt that those results were promising enough to warrant field applications of the method and have suggested their application primarily because some effective control method is needed badly for immediate application over extensive areas. We trust, however, that we also have made it clear and that field men fully understand first, that the results of three years of work are not sufficient basis on which to draw final conclusions; second, that salvage logging cannot be considered a panacea; third, that no data are available on which operators can figure their probable costs or determine the most efficient logging methods until after they have had some experience and a chance to experiment.

If any modification in the Lassen plan can be suggested, we would suggest a change in the approach. Any bidder would be wagering his bid on an operation for which he had no basis for figuring costs and only general ideas concerning the best logging methods. Thus the normal sales policy approach we think should be modified to allow for the consideration that the financial and logging angles of such a sale call for considerable experimentation on the part of the operator.

In commenting on the facts contained in the report we assume that the 4,000 b.m. per acre figure includes some insect killed and infested trees and some silviculturally undesirable trees in addition to high risk trees. Thus this should not be considered a figure for net susceptible volume, but for total salvage volume.

Also we wonder if the inclusion of this supplementary material with high risk trees may not be primarily responsible for statements attesting to the low quality of the salvage material. So far as we are aware, existing determinations of values in high risk trees show them to have about the average value of the stand in which they occur.

We are intensely interested in seeing that the field trials of the salvage sanitation logging method of insect control are set up under conditions that do not cause an undeservedly unfavorable appraisal of the method. For that reason we would suggest that the approach to the first field tests at least be with full consideration of the experimental problems that will face the operator. We would suggest that attempts be made to work with the operator in arranging to carry on these first field tests on a relatively small scale and with experimentation in mind rather than to put the work up along the lines of customary sales procedure, which has been evolved only after long experience.

K. A. Salman
Entomologist

Berkeley, California
August 23, 1940

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